

II. Rejection under 35 U.S.C. § 102(b)

Claim 48 stands rejected under 35 U.S.C. § 102(b) as being anticipated by *Drug News 2001* (Office Action, page 2). Applicants respectfully disagree with the grounds for rejection.

To establish anticipation under 35 U.S.C. § 102(b), the USPTO must demonstrate that each and every limitation of a claim is disclosed in a single cited reference, either expressly or inherently. See *Scripps Clinic & Research Foundation v. Genentech, Inc.*, 927 F.2d 1565, 1576 (Fed. Cir. 1991). Moreover, “[t]he disclosure in an assertedly anticipating reference must be adequate to enable possession of the desired subject matter. It is insufficient to name or describe the desired subject matter, if it cannot be produced without undue experimentation.” *Elan Pharmaceuticals Inc. v. Mayo Foundation for Medical Education and Research*, 346 F.3d 1051, 1055 (Fed. Cir. 2003). In this case, *Drug News 2001* merely discloses the code name “ACP-103.” As a result, claim 48 is not anticipated by *Drug News 2001* because (a) the chemical structure of the compound of Formula (I) of claim 48 is not disclosed in *Drug News 2001*, and (b) *Drug News 2001* does not enable one of ordinary skill of the art to produce the recited compound.

A. The chemical structure of ACP-103 is not disclosed in *Drug News 2001*.

Drug News 2001 does not disclose the chemical formula or structure of a compound of claim 48 and therefore *Drug News 2001* does not teach each and every element of the claim. In *Drug News 2001*, the code name “ACP-103” is not associated with a specific compound or chemical structure. Applicants respectfully submit that, based upon the code name “ACP-103” alone, one of ordinary skill in the art would not have been able to determine the chemical structure of the compound prior to the effective filing date of this application.

The Office Action alleges that Applicants admitted in U.S. Provisional Applications Nos. 60/479,346 and 60/479,346 that the structure of ACP-103 is known in the art. (Office Action, page 2). Applicants respectfully disagree for reasons discussed in the interview which is summarized above. The provisional applications of record do not contain any admission that the chemical structure or formula of ACP-103 were known in the prior art. Indeed, the instant application claims priority to the provisional applications, as these

provisional applications provide the chemical name and structure of ACP-103 in support of the presently claimed subject matter.

For at least the reasons discussed above, *Drug News 2001* does not disclose each and every limitation of claim 48, and as such, the claim is not anticipated by this reference. See *Scripps Clinic & Research Foundation*, 927 F.2d at 1576. Applicants respectfully request that the rejection under 35 U.S.C. § 102(b) be withdrawn.

B. *Drug News 2001* is not an enabling disclosure of the structure of ACP-103.

In order to be an anticipating reference under 35 U.S.C. § 102, a reference must be enabling “so that the claimed subject matter may be made or used by one skilled in the art.” *Impax Laboratories, Inc. v. Aventis Pharmaceuticals, Inc.*, 468 F.3d 1366, 1381 (Fed. Cir. 2006). The subject matter recited in claim 48 is the compound of formula (I), and pharmaceutically acceptable salts thereof. *Drug News 2001* merely refers to a compound by the code name “ACP-103.” *Drug News 2001* does not teach any chemical structure or provide a synthesis or other preparation of ACP-103. As such, there is no way one of ordinary skill in the art could envision any chemical structure based on *Drug News 2001*, much less prepare the compound. Accordingly, *Drug News 2001* does not enable one of ordinary skill in the art to make or use a compound of claim 48. See *Reading & Bates Construction Co. v. Baker Energy Resources Corp.*, 748 F.2d 645, (Fed. Cir. 1984) (claimed process not anticipated by promotional brochure merely boasting the results of the process).

Therefore, for these reasons in addition to those explained in subsection A above, claim 48 is not anticipated by *Drug News 2001*. Applicants respectfully request that the rejection under 35 U.S.C. § 102(b) be withdrawn.

III. Rejection under 35 U.S.C. § 103(a)

A. *Drug News 2001* is not the closest prior art.

Claims 1-8 and 90-106 stand rejected under 35 U.S.C. § 103(a) as being allegedly obvious over *Drug News 2001* in view of Andersson, further in view of Goodman & Gilman’s *The Pharmacological Basis of Therapeutics*, 7th ed. (“Goodman & Gilman’s”) (Office Action, pages 5-6). Applicants respectfully disagree.

The Examiner alleges that Andersson, which discloses a genus of compound encompassing the compound of formula (I), is not the closest prior art because *Drug News*

2001 discloses the claimed species. (Office Action, page 3). As explained above, *Drug News 2001* does not disclose or suggest the structure of a compound of the instant claims. Once *Drug News 2001* is removed, the closest prior art reference to cited by the Examiner is believed to be Andersson.¹ Andersson, which discloses a genus of compounds encompassing the compound of formula (I), does not disclose or suggest the subject matter of claim 48. It does, however, disclose 5-HT_{2A} inverse agonists. That alone is not enough to render the claims *prima facie* obvious as discussed below.

B. No *prima facie* case of obviousness has been made.

As mentioned in Applicants' response to the final Office Action of July 11, 2008, the law of obviousness in cases concerning structurally similar compounds "requires a showing of 'adequate support in the prior art' for the change in structure." *Takeda Chemical Ind., Ltd. v. Alphapharm Pty., Ltd.*, 429 F.3d 1253, 1356 (Fed. Cir. 2007) (quoting *In re Grabiak*, 769 F.2d at 729). In *Eisai Co. Ltd. v. Dr. Reddy's Laboratories, Ltd.*, the Federal Circuit held that claims to a specific compound were not obvious over the prior art's teaching of a structurally similar compound. *Id.* at 1359. The closest prior art taught a species similar in structure to the claimed compound, yet the Court still found there was no motivation to modify the structure of the prior art compound in the required way to arrive at the claimed compound. *Id.*

Here, the Office Action has not identified a specific compound from the prior art that would render the compound of the instant claims *prima facie* obvious. Andersson discloses many compounds, but not any compound encompassed by the present claims. And, as was the case in *Eisai*, Andersson provides no motivation or reason to modify the structure of any specific compound to arrive at the claimed compound. Because the USPTO has not met its burden of demonstrating how one of ordinary skill in the art would be motivated to modify a compound of Andersson in order to arrive at the claimed, a *prima facie* case of obvious has

¹ To the extent the *Drug News 2001* is available as prior art under 35 U.S.C. § 103(a), Applicants respectfully submit that the claims are patentable over *Drug News 2001* alone or in combination with Andersson.

not be made.² See *Takeda*, 429 F.3d at 1360 (the prior art provided no motivation to modify that compound to arrive at the claimed compound).

C. Applicants have demonstrated unexpected results that rebut even a *prima facie* case of obviousness.

Even assuming, *arguendo*, that the Examiner has stated a *prima facie* case of obviousness, a *prima facie* case of obviousness may be rebutted with evidence of unexpected results.³ *Pfizer, Inc. v. Apotex, Inc.*, 480 F.3d 1348, 1369 (Fed. Cir. 2007). Further, the Examiner is required to consider all rebuttal evidence submitted by an applicant, including evidence of unexpected results. See *In re Sullivan*, 498 F.3d 1345, 1351-52 (Fed. Cir. 2007). As mentioned in Applicants' previous response, the declaration of Dr. Douglas W. Bonhaus ("Bonhaus Declaration") provides experimental data showing that the compound of formula (I) and its salts possess unexpectedly superior biological properties as compared to the compounds of Andersson (see, e.g., Bonhaus Declaration ¶¶ 19-20).

In the telephonic interview of January 26, 2009, once the question of anticipation over *Drug News 2001* was resolved, the Examiner stated her opinion that the data for the tartrate and hydrochloride salts of the compound of formula (I) rebutted any *prima facie* case of obviousness over Andersson. However, the Examiner wished to reconsider the Bonhaus Declaration with the Andersson reference as the closest art.

The claimed subject matter is directed to the compound of formula (I), not specific salts thereof.⁴ As shown above, the core structure or free base is a novel molecule not

² Even if the Examiner relies on any compound in Andersson to allege obviousness as in *Eisai* or *Takeda*, Andersson lacks any suggestion or motivation to modify any compound of Andersson to arrive at the claims herein. *Eisai*, 533 F.3d at 1357; *Takeda*, 429 F.3d at 1360. Further, a legally proper rejection requires a suggestion or motivation to modify specific substituents to arrive at the claimed compound. See *Takeda*, 429 F.3d at 1357 (necessary to identify how a chemist would modify a known compound in a particular manner to establish *prima facie* obviousness of the new compound). Such is clearly missing from Andersson.

³ As shown above, Applicants do not concede that a *prima facie* case of obviousness has been legally established.

⁴ Applicants' co-pending U.S. Application No. 11/235,381, filed September 26, 2005, is directed to specific salts of the compound of formula (I).

disclosed in *Drug News 2001* or Andersson. Further, the claimed compound and its salts possess properties that make it a superior drug candidate over the compounds of Andersson (see Bonhaus Declaration ¶ 20). . The comparative data provided in the Bonhaus Declaration for a tartrate and a hydrochloride salt of the compound of formula (I) demonstrate the superiority of the claimed invention over Andersson. In view of the data provided for hydrochloride and tartrate salts, one of ordinary skill in the art would expect that pharmaceutically acceptable salts of the compound of formula (I) would possess superior properties over the compounds of Andersson. Indeed, Applicants direct the Examiner's attention to paragraph 20 of the Bonhaus Declaration, in which Dr. Bonhaus provides his opinion that "the compound of Formula I and its salts are surprisingly superior as orally bioavailable selective 5-HT_{2A} receptor inverse agonists compared to any of the Andersson compounds tested." (*Id.* at ¶ 20) (emphasis provided). Because the data provided in the Bonhaus Declaration demonstrate that the compound of formula (I), including pharmaceutically acceptable salts thereof, is surprisingly superior to the compounds of Andersson, the instant claims are not obvious. *Pfizer*, 480 F.3d at 1369. Therefore, Applicant respectfully requests that the rejection under 35 U.S.C. § 103(a) be withdrawn.

IV. Obviousness-Type Double Patenting Rejections

Claims 1-8, 48 and 90-106 stand rejected under the judicially created doctrine of obviousness-type double patenting as allegedly being unpatentable over claims 1-3 and 5-7 of U.S. Patent Application No. 11/134,769; claims 16-18 of U.S. Patent Application No. 11/416,855; and claims 1, 2 and 4-6 of U.S. Patent Application No. 10/850,819.

If provisional obviousness-type double patenting rejections are the only rejections remaining in an earlier filed pending application, the Examiner should withdraw those rejections and permit the earlier-filed application to issue as a patent without a Terminal Disclaimer. MPEP § 804, subsection I.B. The filing date of the instant application is January 15, 2004. The filing date of U.S. Patent Application No. 11/134,769 is May 20, 2005. The filing date of U.S. Patent Application No. 11/416,855 is May 3, 2006. The filing date of U.S. Patent Application No. 10/850,819 is May 21, 2004. Therefore, the instant application is the earliest-filed application. Applicants' submit that the above rejections under 35 U.S.C. §§ 102(b) and 103(a) have been overcome. Thus, only provisional

obviousness-type double patenting rejections remain. Applicants respectfully request that the Examiner withdraw the rejections and allow the instant application to issue as a patent without a Terminal Disclaimer.

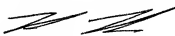
Conclusion

In view of the foregoing, the rejections of the claims should be withdrawn. Consideration of the above remarks and allowance of the pending claims is respectfully requested. If the Examiner believes it would be useful to advance prosecution, the Examiner is invited to telephone the undersigned at (858) 314-1200.

No fee is believed to be due with this submission. However, the Commissioner is hereby authorized to charge any required fee under 37 C.F.R. § 1.17, or any other required fee, or any credits, to Jones Day Deposit Account No. 503013 (referencing 598154-999016).

Respectfully submitted,

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